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Museo Municipal de Huaca Malena
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Capilla de Asia, Peru

PROJECT REPORT

A collaborative textile conservation course took place between January 18 and January 27, 2006, in and around Lima, Peru. The goals of the course were to study, document, and conserve pre-Columbian textiles from Huaca Malena, concentrating on tie-dyed textiles. Our team consisted of fourteen people: Alejandra Ortiz, Amy Tjong, Camille Myers Breeze, Claudia Andrea Villa Robles, Claudia Bastante, Cynthia Little, Georgia Gleason, Janet Price, Kristin McQuillen, Liz Karin Enciso Benites, Louise Groll, Mary Lou Murillo, Michaelle Biddle, and Peggy Whitehead. Supervising the course was Rommel Angeles Falcon, archaeologist with the Instituto Nacional de Cultura, and Director of the Museo Municipal de Huaca Malena. Our work space was donated by the Museo de Arte de Lima courtesy of Angela Pacheco, Director of Conservation.

The Municipal Museum of Huaca Malena is located in the town of Asia, 100 kilometers south of Lima. The site of Huaca Malena served as a religious and administrative center from 400 to 500 AD, and between approximately 700 and 1100 AD the site was used as a cemetery. The museum collection consists of almost 4000 textiles and 40 mummy bundles. As a result of the 2006 course, ten textiles were documented, photographed, surface cleaned, and mounted for storage and display. Two additional textiles were documented, photographed, and surface cleaned, and await future mounting.

Conservation

Conservation treatment began with surface cleaning the textiles with a vacuum and/or dry brushes. Where accretions of soil or organic materials were present, the textile was cleaned with additional mechanical action and cotton swabs moistened with bottled water or saliva. The goals of cleaning were to remove particulate matter and accretions that contribute to accelerated aging of the textiles; washing was not done.

Some of the textiles required humidification in order align and flatten them prior to mounting. In most cases, this was achieved by localized application of water or saliva followed by finger pressing or weighting with glass. Three textiles were rehydrated in a Goretex humidification chamber. The chamber was created by covering the textile with a moistened sheet of Goretex/Polyester-felt membrane followed by polyethylene. The textile was allowed to sit in this microclimate for fifteen-minute intervals until it was moist enough to be safely flattened and realigned.

Storage and display mounts were constructed of sheets of corrugated polyethylene assembled with 3M double-stick tape. The two-, three-, or four-ply mounts were covered with cotton poplin that was adhered with BEVA thermoplastic adhesive film. Each of the ten textiles was stitched to a mount using mercerized cotton threads. Stitching was concentrated around the perimeter, around losses, and throughout the body of the textile in a supportive grid. The ten mounted textiles are now in better condition for long-term storage and can be safely displayed on a rotating schedule. The mounts are also suitable for archival framing.

Below are individual reports for the twelve textiles documented and treated this year. Additional photographs from the project are also included.

Object: Plain-weave tie-dyed head cloth
Accession #: MMHM 2921 (T-97)
Dimensions: 69.5 cm H x 6.9 cm W
Materials: Cotton warp and weft; single ply S twist
Treated by: Peggy Whitehead, Georgia Gleason



Description

This textile consists of two equal sized rectangles, each of which is four-selvedged panel, sewn together along a center seam. The textile is an open plain weave with a two-tone tie-dyed design. Each half was tie-dyed separately, and there is no apparent pattern to the design. One corner is missing along with a significant portion of that panel. The construction thread connecting the two halves of the textile is visible along the length of the seam line, which is fragmented and has many areas of loss. There are 25 holes throughout the textile, ranging from .5cm in diameter to large areas of loss. The cotton fiber was somewhat dry prior to humidification, but has regained some flexibility with treatment. There is some variation in color across the piece, and evidence of burnout around the edges of most holes. Two opposing corners are distorted and wrinkled consistent with having been tied during the time when the textile was in active use.

Treatment

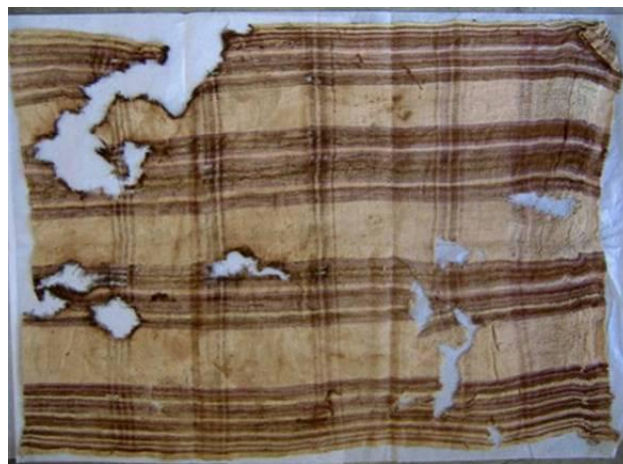
This textile was vacuumed, then humidified using a Goretex chamber and finger-pressed. When dry, it was placed on the mount, aligned, and pinned. The two halves of the textile were reconnected with cotton thread along the original seam, mimicking the original stitching pattern. The textile was then stitched to the mount around the perimeter using a whip stitch. Holes and losses were stabilized with tacking stitches.



Object: Plaid cloth
Accession #: T-19J21
Dimensions: 68 cm H x 48 cm w
Materials: Cotton warp and weft; single ply S twist
Treated by: Michaelle Biddle, Louise Groll

Description

This plaid textile shows a complex combination of weave patterns and colors for a relatively simple textile. The warp and weft each have cream, lavender, and brown cotton yarns. In areas where cream warp and cream weft are woven together, a 2:2 plain-weave structure is used. Where cream warp is combined with lavender and brown weft, or cream weft crosses lavender and brown warp, a 2:1 plain weave is used. Where lavender or brown are woven together, single warps and wefts are used for a 1:1 plain weave. Adjacent to one short selvedge is a loosely woven 3.5-cm strip, indicating this is where weaving concluded. Several warp and weft ends can be seen on the backside. At each warp selvedge the heading and footing cords formed corner tassels, which remain at two opposing corners. There are over 20 holes ranging in size from 1 cm diameter to larger areas of loss. Toward one warp selvedge, the losses are associated with areas of distortion and burnout. The burnout edges are fragile and powdering. There are scattered stains. There is some human hair caught in the weave.



Treatment

The textile was vacuumed to remove particulate matter and soiling. It was finger pressed to relax wrinkled and distorted areas, and then mounted onto a fabric-covered board. The perimeter of the textile was secured with whip stitches. The body was stabilized with five vertical rows of running stitches and four horizontal rows of running stitches. Tacking and whip stitches were used to secure the areas surrounding major losses and exposed warps.



Object: Tri-color, tie-dye textile
Accession #: T72A MMHM 230
Dimensions: 105.5 cm H x 34 cm W
Materials: Cotton warp and weft; single ply S twist
Treated by: Kristin McQuillen, Cynthia Little



Description

This textile consists of three separately woven plain-weave fabrics that are joined together with whip-stitching. Although there are major areas of losses, remaining selvages on all four edges indicate that this is not a fragment. There are a few stitch remnants along the outside selvages which suggest previous attachment to something else. One fabric is solid blue, one is solid natural-white, and one is tie-dyed. The tie-dyed fabric was originally natural-white. Two dye baths of brown produced concentric diamonds of natural-white, light brown, and darker brown. There are about 16 holes ranging in size from 2 mm to 6 cm diameter. Some larger areas of loss have burnout and discoloration along the edges, most notably throughout the tie-dyed fabric. The largest loss in the natural-white and blue fabrics does not show any burnout.

Treatment

The textile was vacuumed to remove particulate matter and soiling. It was humidified in a Goretex chamber, and then finger-pressed to relax wrinkled and curled areas. The textile was mounted onto a fabric covered board. The fragment was first secured along the original seams with small whip stitches, and then the perimeter selvages were tacked with whip stitches. Tacking stitches were used to secure the areas surrounding losses and burnout. Areas of extensive fraying were secured with a couching stitch.



Object: Tie-dyed fragment
Accession #: SOCSA – Asia S
Dimensions: 24 cm W x 40 cm H
Materials: Camelid warp and weft; 2 S ply Z spun; self-fringe
Treated by: Camille Breeze, Janet Price



Description

This fragment consists of four main pieces of textile, which represents segments of the corner of a traditional Nasca-Wari patchwork. The textiles are plain weave and are assembled into a discontinuous warp and weft patchwork. The segments of patchwork are interlocked in the warp direction with a connecting yarn; slits in the weft direction are whip-stitched closed. The segments were tie-dyed separately and then assembled in their current configuration. One segment was natural-white tie-dyed with ochre color; one segment was natural-white tie-dyed with reddish brown; and one segment was dyed ochre and then painted with red pigment in imitation of tie-dyed design. This

painted segment also has a self-fringe and appears to be a corner block. The camelid fibers are very brittle, especially in the more fragmented segments. There is discoloration that appears to be water-borne in nature.

Treatment

This textile was vacuumed, then humidified using a Goretex chamber and finger-pressed. When dry, it was placed on the mount, aligned, and pinned. The textile was stitched to the mount around the perimeter using a whip stitch. The fringe was attached with tacking stitches. Holes and losses were stabilized with tacking stitches. Areas of extreme weakness were supported with laid-couching stitches.



Object: Needle-looped bag
Accession #: 079.003.001
Dimensions: 11x14 cm
Materials: Camelid warp and weft; 2 S ply Z spun
Treated by: Claudia Bastante



Description

This textile is composed of one single piece of fabric that was assembled into a bag. It is needle-looped, not woven, in a variety of reds, browns, beige, natural-white, and yellow. A braided cord is stitched to the upper selvedge and there is evidence of a strap. The colors used in this cord were brown and beige. There are several significant losses in both the bag and the braid, and an ancient repair in yellow thread shows that the textile was heavily used. The piece shows some fading and discoloration.

Treatment

This textile was vacuumed. It was then placed on the mount, aligned, and pinned. The textile was stitched to the mount around the perimeter using a running stitch. Holes and losses were stabilized with tacking stitches. The braid was stabilized with diagonal tacking stitches. Remaining threads of the strap were tacked to the mount with stitches.



Object: Tapestry band
Accession #: 108.01.04
Dimensions: 24 x 14 cm
Materials: 2 S ply Z spun camelid weft; 2 S ply Z spun cotton warp
Treated by: Claudia Villa Robles



Description

This polychrome tapestry fragment is made of natural-white cotton warp with wool weft in three shades of red, two greens, two yellows, brown, and black. The geometric pattern consists of lines and zig-zags. One of the long edges is a selvedge and the other long edge is cut. Both short edges are cut and have unraveled threads. The textile shows areas of discoloration and a staining.

Treatment

This textile was vacuumed. It was then placed on the mount, aligned, and pinned. Unraveling yarns at the short ends were tucked under the textile. The textile was stitched to the mount around the perimeter using running and tacking stitches. Two rows of running stitched secure the body of the textile to the mount.



Object: Brocaded bag fragment
Accession #: T133A
Dimensions: 20 cm H x 16 cm W
Materials: 2 S ply Z spun cotton warp and weft; 2 S ply Z spun supplementary wool weft
Treated by: Liz Enciso

Description

This fragment consists of a cotton plain-weave textile with geometric/feline brocade designs in shades of red and brown camelid. One of the warp selvages is cut. This cut warp selvedge suggests that this fragment was longer, and may have been used as a bag. Remnants of what appears to be a strap may confirm this. In the middle of the fragment there is a 3 x 5 cm hole and a horizontal tear with associated discoloration. The cotton ground fabric has deteriorated around the hole leaving supplementary wool threads.



Treatment

This textile was vacuumed. It was then placed on the mount, aligned, and pinned. The textile was stitched to the mount around the perimeter using running and tacking stitches. The perimeter of the center hole was supported with tacking stitches and loose camelid yarns were stitched down with laid-couching stitches. The fragment of strap was tacked down with stitches.



Object: Slit-weave Tapestry Fragment

Accession #:

Dimensions: 25 cm x 31cm

Materials: 2 Z ply S spun camelid weft; 2 S ply Z spun cotton warp and weft

Treated by: Janet Price, Camille Breeze



Description

This tapestry fragment has cotton warp, and wool and cotton weft in pink, red, green, blue, yellow, browns, and white cotton. Areas of darker brown may be an ancient repair. The design is a diagonal motif of stepped frets and waves. There are fragments of one selvage. All four edges are extensively frayed. The wool yarns are only loosely plied, and the cotton warp is fragile and not tightly spun. The textile is not heavily soiled despite evidence of discoloration in the white areas. There is some human hair caught in the weave.

Treatment

This textile was vacuumed, then humidified using a Goretex chamber and finger-pressed. When dry, it was placed on the mount, aligned, and pinned. The textile was stitched to the mount around the perimeter using a whip stitch. The fringe was attached with tacking stitches. Holes and losses were stabilized with tacking stitches. Areas of extreme weakness were supported with laid-couching stitches.



Object: Sling
Accession #: 113.01.01
Dimensions: 246 cm x 2.3 cm
Materials: 2 S ply Z spun camelid
Treated by: Amy Tjong, Mary Lou Murillo



Description

This sling is made of 2 ply S twist yarns. The center of the sling is made of red, blue, green, yellow, and white wrapped yarns. To either side of the center is a length of diamond-patterned tubular weave in green, red, and white. The two ends of the sling are a red braid ending in red fringe. The sling is intact with only minor discoloration.

Treatment

This textile was vacuumed, placed on the mount, aligned, and pinned. The textile was stitched to the mount along its length and throughout the fringe using tacking stitches.



Object: Fragment of brocaded cotton

Accession #: MN HM-2

Dimensions: 36.5 cm W x 15 cm H

Materials: 2 S ply Z spun cotton warp and weft; 2 S ply Z spun camelid brocade yarns

Treated by: Alejandra Ortiz



Description

The body of this fragment is plain-weave brown cotton. There are three selvages and one long edge is cut. Along the other long edge is a band of brocaded design in red, green, cream, brown, dark brown, and blue. Across one corner are additional brocaded designs in stepped rectangles with geometric/zoomorphic figures. The fragment is stained and shows evidence of water-born discoloration. There are several small holes and a missing corner.

Treatment

This textile was vacuumed. It was then placed on the mount, aligned, and pinned. The textile was stitched to the mount around the perimeter using whip and tacking stitches. Holes and losses were stabilized with tacking stitches. The body of the textile was supported with running stitches.



Object: Headscarf
Accession #: 126.001.001
Dimensions: 75cm H x 43cm w
Materials: Cotton



Description

This fragment consists of four separate pieces of cotton plain weave fabric with horizontal stripes of leno weave interlaced every 1.2 cm. Each block was woven as a four-selvedge textile, tie dyed separately, and then whip stitched together. Two blocks are natural-white tie-dyed with blue, and two are natural-white tie-dyed with brown. The rows of tie-dye are executed between rows of leno-weave design. At two ends of the textile there are 7-cm sections of plain weave. There are numerous holes and areas of burnout, and the textile has areas of dark staining. One brown and one blue block are largely missing, with the majority of the remaining material located along seam lines.

Treatment

The textile was vacuumed and humidified. No further treatment was done at this time.



Object: Net Hat
Accession: # T110B
Dimension: Approximately 16 cm H x 21 cm W; 16+ cm cords
Materials: 2 S ply Z spun vegetable-fiber net; cotton embroidery yarn



Description

The body of this hat is a net made of vegetable fiber. Supplementary cotton yarns create geometric/zoomorphic designs. The hat was created by gathering a rectangle of net on each side with a braided cord; these cords then form ties which secured the hat. The cords are in the tied position. Although the hat is a dark natural-white color, there are indications that the net may have been pink. The fibers are brittle and broken in some areas.

Treatment

The textile was not treated at this time.



Reports in Spanish

Object: Needle-looped bag
Accession #: 079.003.001
Dimensions: 11x14 cm
Materials: Camelid warp and weft; 2 S ply Z spun
Treated by: Claudia Bastante

Previamente al proceso de montaje, a la pieza textil se le removio toda particula o elemento contaminante. El proceso de montaje se llevo a cabo teniendo en cuenta, el estado de la pieza, estabilizandola previamente. Posteriormente el fragmento fue asegurado previamente antes de empezar a dar las puntadas, a la base tanto a manera horizontal como vertical, con el empleo de alfileres pero estos solo se utilizaron como elementos fijadores de la pieza. Una vez asegurada la pieza, se procedio a dar las puntadas. Se uso la puntada corrida a lo largo del perimetro y luego se dieron puntadas amplias sobre toda la superficie, haciendo un patron de espiral para asegurar toda la superficie. Luego se procedio a reconocer los lugares que necesitaban tratarse. Primero se aseguraron tres pequenos agujeros usando no mas de cuatro puntadas por cada uno. Lo siguiente fue tratar el area triangular faltante en la superficie superior. Las puntadas hechas fueron de tipo latigo. Se aseguro la superficie superior con la inferior dando la impresion de ser una sola tela. Luego se trato el borde derecho central inferior donde habia un area remendada en la antiguedad con hilos amarillos y marrones. Se hicieron puntadas amplias en las zonas firmes entre los agujeros que se escondieron bajo los hilos de remienda. Luego se trato el cordón trenzado en la parte superior de la bolsa. Se hicieron puntadas diagonales que seguian la torsion de los hilos de la trenza. Lo mismo se hizo con tres hilos sueltos en la parte superior derecha de la bolsa. Finalmente se aseguraron tres puntos sueltos sobre la superficie y el lado izquierdo que tenia hilos sueltos y partes casi destejidas. Todo eso se aseguro al montaje con puntadas corridas verticales y al tejido con puntadas corridas horizontales. Para todo el tratamiento se utilizaron colores que se puedan camuflar facilmente, tratando de ser lo mas parecidos posibles a los colores de los hilos del textil. La variedad de colores utilizada fue de rojos, marrones, verdes, amarillos y blancos.

Object: Brocaded bag fragment
Accession #: T133A
Dimensions: 20 cm H x 16 cm W
Materials: 2 S ply Z spun cotton warp and weft; 2 S ply Z spun supplementary wool weft
Treated by: Liz Enciso

Antes de iniciar el proceso de montaje, la pieza textil fue sometida a un proceso de limpieza en el cual se elimino todo elemento contaminante. El proceso de montaje se decidio de acuerdo a las necesidades y la condicion del fragmento en cuestion. El fragmento fue asegurado al bastidor, cosiendo el perimetro de la tela con la puntada "Overcast Sticht". Para esta area se usaron los colores de hilo "610 y 898" (verde y marron). Luego se hicieron dos filas de puntadas usando "running sticht" en las zonas medias superior e inferior. Las puntadas se escondieron dentro de las tramas. Se utilizo el color de hilo 898 (marron). Se procedio a estabilizar el area central del textil, donde se hallaba una gran rotura cosiendo los bordes con "overcast sticht". Se uso el hilo color 632. Posteriormente se procedio a estabilizar las tramas sueltas del agujero central utilizando "laid and couched sticht". Se hicieron cuatro (4) columnas paralelas con una distancia de 1.5 cm. entre ellas. Luego se hicieron pequenas puntadas para asegurar la estabilidad y la horizontalidad de las tramas. Se usaron hilos del color 838. Despues de esto, se consolidaron las tramas sueltas de la esquina inferior derecha usando "laid and couched sticht". Finalmente se unio al batidor el cordón de la esquina superior derecha usando "overcast sticht" y el hilo 611.

Object: Tapestry band
Accession #: 108.01.04
Dimensions: 24 x 14 cm
Materials: 2 S ply Z spun camelid weft; 2 S ply Z spun cotton warp
Treated by: Claudia Villa Robles

Previamente al proceso de montaje, a la pieza textil se le removio toda particula o elemento contaminante. El proceso de montaje se llevo a cabo teniendo en cuenta, el estado de la pieza, estabilizandola previamente. Posteriormente el fragmento fue asegurado previamente antes de empezar a dar las puntadas, a la base tanto a manera horizontal como vertical, con el empleo de imperdibles pero solo estos se utilizaron como elementos fijadores de la pieza. Una vez asegurada la pieza, se procedio a dar las puntadas. Los lados de la pieza, no presentaban mayor dano y por ello se procedio a realizar la puntada running stitch siguiendo la direccion de las tramas. En lo que respecta a los dos extremos se procedio a utilizar la puntada overcast stitch. Con el fin de asegurar las tramas del tejido. En parte central del tejido se procedio a aplicar la puntada running stitch en sentido a las tramas, con el fin de asegurar el tejido la base.

Object: Fragment of brocaded cotton
Accession #: MN HM-2
Dimensions: 36.5 cm W x 15 cm H
Materials: 2 S ply Z spun cotton warp and weft; 2 S ply Z spun camelid brocade yarns
Treated by: Alejandra Ortiz

Fragmento que consiste en una sola pieza conformada por una tela llana de algodón, 1x1 de color marrón. El extremo presenta una franja seguida por un motivo escalonado, conformado por pequeñas porciones tipo dameros. Para formar este diseño se jugó con urdimbres complementarias color rosado, verde, crema, marrón oscuro, marrón claro y gris. Presenta motivos zoomorfos en formas geométricas. Tanto la superficie delantera como posterior evidencian manchas de decoloración debido al agua. Conserva un orillo de trama y un orillo de urdimbre. Presenta pérdida de tejido estructural e hilos deshilachados en dos áreas del interior del tejido. Asimismo, encontramos cinco pequeños agujeros (de 0.4 cm de diámetro en promedio) en la superficie del tejido.

Previamente al proceso de montaje, a la pieza textil se le removio toda particula o elemento contaminante. El proceso de montaje se llevo a cabo teniendo en cuenta, el estado de la pieza, estabilizandola previamente. Posteriormente el fragmento fue asegurado previamente antes de empezar a dar las puntadas, a la base tanto a manera horizontal como vertical, con el empleo de alfileres pero estos solo se utilizaron como elementos fijadores de la pieza. Una vez asegurada la pieza, se procedio a dar las puntadas. Se uso la puntada corrida a lo largo del extremo superior del tejido, y utilizando el mismo tipo de puntada (corrida y horizontal) desde este extremo hacia el centro; utilizandose de esta manera un total de 5 líneas paralelas con la finalidad de asegurar toda la superficie. Posteriormente, para asegurar el borde derecho, se utilizo la puntada corrida, utilizando una pequeña variante que se basa en hacer las puntadas siguiendo la dirección de las tramas. Por último, para los extremos inferior e izquierdo se utilizo la puntada de tipo latigo. Una vez finalizada la tarea de coser los perimetros se procedio a reconocer los lugares que necesitaban tratarse. Primero se aseguraron los bordes de las dos partes faltantes usando la puntada tipo latigo; es importante mencionar que las puntadas fueron dispersas y escasas. Luego, aseguramos las zonas que presentaban hilos deshilachados, para lo cual se uso igualmente la puntada tipo latigo. Finalmente, se dieron algunas puntadas de manera aleatoria a lo largo del brocado para asegurar mejor su superficie. Para todo el tratamiento se utilizaron colores que se puedan camuflar fácilmente, tratando de ser lo mas parecidos posibles a los colores de los hilos del textil. La variedad de colores utilizada fue de marrones, grises, rosados y cremas.



Additional Photos

